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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,957	01/23/2004	Dale J. Heider	P06600US00	7896

22885 7590 08/13/2004

MCKEE, VOORHEES & SEASE, P.L.C.  
801 GRAND AVENUE  
SUITE 3200  
DES MOINES, IA 50309-2721

EXAMINER

GUTMAN, HILARY L

ART UNIT	PAPER NUMBER
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3612

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/763,957

Applicant(s)

HEIDER ET AL.

Examiner

Hilary Gutman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-7,21 and 22 is/are allowed.
- 6) ☒ Claim(s) 8,10,11,19,23 and 25 is/are rejected.
- 7) ☒ Claim(s) 2,9,12-18,20 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/23/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

O page 5 line 27, "Rotation" should be "rotation".

On page 7, line 9, "bottom" should be deleted. On line 11, "member" should be "edge". On line 29, "begins" should be inserted before "rolling". On line 30, the comma after "63" should be a semicolon. Appropriate correction is required.

### *Claim Objections*

2. Claims 2, 8, 15, and 23 are objected to because of the following informalities:

In claim 2, on line 2, a period should be inserted after "structure.

In claim 8, on lines 13-14, "the angled member" should apparently be "the gate".

In claim 15, on line 7, "the" should be inserted before "vertical movement".

In claim 23, line 7, "a gate" should be "the gate".

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8, 10-11, 19, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Baltz et al.

For claim 8, Baltz et al. (5,404,827) disclose a hopper closure assembly for opening and closing a discharge opening O in a hopper H containing granular material (or

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lading) L that by gravity has a weight force extending toward the discharge opening O, the hopper closure assembly comprising: a gate frame (generally F) surrounding the discharge opening; a gate 26 moveably mounted to the gate frame from a closed position (Figure 3) in covering relation over the discharge opening to an open position (Figure 6C) uncovering at least a portion of the discharge opening for removal of the granular material through the discharge opening; the gate 26 having a leading edge (Figure 6A) that moves across the discharge opening when the gate moves between the open and closed positions; the leading edge having an angled member (not numbered, Figure 3) that angles away from the discharge opening and the granular material within the hopper, whereby the weight force of the granular material engages the angled member during movement of the gate from the closed position to the open position and includes a horizontal component force that is in the direction of movement of the gate from the closed to the open position.

With regard to claim 10, the gate has a following edge 27 opposite the leading edge, the leading edge approximately level with the following edge.\

With regard to claim 11, the angled member is L-shaped and the gate frame has a receiving edge (generally at 32a) that accepts the L-shaped leading edge.

For claim 19, Baltz et al. inherently disclose a method of opening a hopper closure assembly having a hopper H containing granular material L and a discharge opening O below the granular material whereby the granular material by gravity has a weight force directed toward the discharge opening, the method comprising: moving a gate 26 having a leading edge (Figure 6A) from a closed position (Figure 6A) wherein the gate covers the discharge opening to an open position (Figure 6C) wherein the gate

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opens the discharge opening to permit the granular material to move through the discharge opening; angling an angled portion of the leading edge of the gate away from the discharge opening whereby the weight force of the granular material acting on the angled portion will exert a horizontal component force on the gate in the direction of movement of the gate from the closed to the open position.

For claim 23, Baltz et al. inherently disclose a method of opening a hopper closure assembly, comprising providing a hopper H containing granular material L and a discharge opening O below the granular material whereby the granular material by gravity has a weight force directed toward the discharge opening; providing a longitudinal sliding gate 26 which parallels a plane defined by the discharge opening; moving the gate 26 having a leading edge from a closed position wherein the gate covers the discharge opening to an open position wherein the gate opens the discharge opening to permit the granular material to move through the discharge opening; interacting the granular material with the gate to assist in movement; guiding the leading edge of the gate in a direction away from the discharge opening during movement of the gate from the closed to the open positions.

With regard to claim 25, Baltz et al. further inherently disclose angling an angled portion of the leading edge of the gate away from the discharge opening whereby the weight force of the granular material acting on the angled portion will exert a horizontal component force on the gate in the direction of movement of the gate from the closed to the open position.

*Allowable Subject Matter*

5. Claims 1, 3-7, and 21-22 are allowed.

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6. Claims 2, 9, 12-14, 15-18, 20, and 24 are objected to as being dependent upon a rejected base claim, containing a minor informality, or being dependent upon an objected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and rewritten to overcome the objections set forth above.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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9. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents

Washington, D.C. 20231

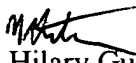
**or faxed to:**

(703) 872-9326, (for formal communications intended for entry)

**or:**

(703) 746-3515, (for informal or draft communications, please clearly

label "PROPOSED" or "DRAFT").

  
Hilary Gutman  
August 5, 2004